

Towards a Safer 63

The Report of the Special Advisor on Highway 63

Mike Allen, MLA Fort McMurray-Wood Buffalo

June 29, 2012

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Honourable Ric Mclver
Minister of Transportation
#425, 10800 – 97 Avenue
Edmonton, AB T5K 2B6

Dear Minister Mclver:

I am pleased to provide you my report and recommendations intended to improve safety on Highway 63 for your consideration and to provide to Premier Alison Redford.

Since I was appointed as Special Advisor for Highway 63, it has been my privilege to meet and speak with many individuals and groups. Traffic safety on this critical transportation link to Wood Buffalo is a matter that goes beyond local interest. Highway 63 is vital to the future prosperity and health of the region that drives Alberta's and the nation's economy.

Despite the many programs and initiatives already in place, traffic safety continues to be a problem. I hope this report will further motivate the provincial government, communities in Wood Buffalo, industries, individuals and other interested groups to take meaningful action as well.

Twinning the highway as quickly as possible has been identified by all stakeholders as their ultimate goal but it is not the most immediate means to improve traffic safety. Tangible progress that will demonstrate results this year requires a multi-faceted, comprehensive approach which forms the basis of this report and the accompanying recommendations. We have an obligation to work with stakeholders, residents, commuters, industry and all road users to improve safety on our highways.

I appreciate the opportunity to undertake this review.

Sincerely,

Mike Allen, MLA for Fort McMurray-Wood Buffalo

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What I Heard

The public has made it very clear they expect strong, prompt and decisive government action to improve safety on Highway 63.

Residents of Wood Buffalo have strenuously affirmed the need for action. People who live in, work in, or visit Fort McMurray and its surrounding areas have registered their opinion through rallies, correspondence, social media, telephone calls to MLAs, participation in a telephone town hall and more.

This report gives voice to the people who shared their ideas, thoughts and suggestions as well as their personal stories about Highway 63. A comprehensive list is provided in Appendix A.

- 3,555 participated in a telephone town hall on June 14, 2012.
- More than 1,000 commented on Facebook and Twitter.
- More than 250 provided written submissions to government.
- 194 advocated for a safer Highway 63 in “Voices for a Safer Highway 63,” a newspaper supplement in the *Fort McMurray Today*.
- More than 100 stakeholders participated in meetings on Highway 63.
- Residents of the Regional Municipality of Wood Buffalo have been involved in local efforts to improve safety on Highway 63
- Many industry groups reaffirmed their commitment to encourage their employees to drive responsibly.

From this input, several themes emerged:

- Improve highway infrastructure, including efforts to accelerate the twinning of Highway 63 as quickly as possible to meet the needs of highway users.
- Increase traffic enforcement presence and increase penalties to target high-risk drivers.
- Use advanced enforcement and road condition technology to inform drivers of road conditions and delays.
- Increase education campaigns to promote safe driving behaviours.
- Enhance emergency response in the area.
- Government commitment and funding is needed.

While many creative and innovative solutions were presented, this report focuses on the recommendations best able to improve traffic safety and accelerate twinning. These can enable the Alberta government to adopt a multi-faceted, comprehensive approach that addresses the key themes heard through my discussions.

Highway Infrastructure Improvements

1. Accelerate efforts to twin Highway 63, including forming a project management team to ensure the project is delivered on time and that the public is kept up-to-date on the progress.
2. Construct passing lanes in areas of high traffic congestion.
3. Construct more safety rest areas and pullouts along Highway 63.
4. Facilitate the construction of commercial rest areas along Highway 63.
5. Install wildlife fencing in strategic locations and wildlife detection systems to mitigate the risk posed to drivers on Highway 63.
6. Improve highway maintenance.
7. Ensure the line markings on Highway 63 provide safety as well as appropriate passing opportunities.
8. As construction moves forward, utilize unpaved but graded areas over the winter months along Highway 63 as an area for oversized loads.
9. Construct passing/climbing lanes and safety rest areas along Highway 881 to accommodate oversized loads destined to Highway 881 locations.
10. Extend Highway 881 to improve access to new oil sands operations.
11. Complete the planning study for the twinning of Hwy 881 to accommodate continuing development.

Increased Traffic Enforcement

12. Establish a dedicated RCMP/Sheriff and aerial enforcement presence for Highways 63 and 881 to deter dangerous driving behaviour.
13. Increase maximum penalties for high-risk drivers.
14. Implement vehicle seizure for drivers caught speeding 50 km/h over the posted speed limit to deter high-risk drivers.
15. Implement passive intelligent speed adaptation as a voluntary measure the Alberta Transportation Safety Board could use to monitor speed compliance with repeat speed offenders.
16. Implement point-to-point automated speed cameras in locations where collision data shows there is a high incident rate due to unsafe speed.
17. Expand speed reductions to all lanes passing emergency vehicles and tow trucks where a median does not separate traffic.
18. Review permit conditions placed on oversized loads to minimize disruption for peak travel times.

Enhanced Education

19. Enhance driver education through advertising, social media, driver speed feedback signs and safety messaging signs to change the culture of drivers in the region in partnership with existing road safety organizations.
20. Develop an information tool that provides drivers with current online updates and information sign boards to communicate road and weather conditions, traffic delays, time to destination and the movement of oversized loads.
21. Continue to work with industry, associations and existing organizations to promote safety awareness and encourage a culture of safe driving behaviour among their employees.
22. Revise the driver's guide to include a section on safe travel practices when approaching and passing oversized vehicles.

*Put a RCMP/Sheriff EMS station somewhere around Wandering River to make it easier to patrol the road and provide emergency services.
~ Nick Sanders, Fort McMurray Chamber of Commerce*

Support the Alberta government's Shared Growth Strategy to improve emergency response along Highway 63

*It's time to stop playing politics and get this done. No more delays.
~ Telephone Town Hall Participant*

Respondents identified that portions of Highway 63 are not well serviced by emergency response teams. This results in long wait times for emergency response at the scene of collisions. First responders remain an integral safety component ensuring a timely response in the event of collision. A cross-government initiative called the *Shared Growth Strategy* is currently underway to achieve improved emergency response in the region. This report supports the work that is being done through the *Shared Growth Strategy*.

Develop a communications strategy to keep the public informed of safety improvements and the construction progress along Highway 63.

Many constituents from the Regional Municipality of Wood Buffalo have asked the Alberta government to establish a process to provide regular progress updates and address public concerns, consistent with government's commitment to being open and transparent. A project management team will ensure that the construction projects remain on schedule and that the public can be updated quarterly on this progress.

Introduction

Alberta is blessed with an abundance of natural resources and has a rich history of hard work and ingenuity. The development of the oil sands has created many opportunities throughout the province, but has also created unprecedented challenges in the Wood Buffalo region.

Highway 63 connects Alberta to the oil sands and ensuring this highway corridor is safe and can accommodate the continued growth and development planned in the region is essential to the long term growth and prosperity of Fort McMurray, the Wood Buffalo region, the province and Canada. The goal is a safe and driveable highway for all those who travel Highway 63.

The report provides an overview of what the public has said needs to be done to increase safety in the corridor. It captures their priorities around infrastructure (highway twinning, passing lanes, rest areas) enforcement (reducing speed and collision incidents) and education (ingraining in motorists the culture and behaviour of safety) in the short, medium and long term.

Infrastructure improvements to date include the completion of the new Athabasca River Bridge, the completion and addition of passing lanes on Highway 63, the paving of Highway 881 and near-completion of the Thickwood and Confederation interchanges. Basic improvements to the Highway 63 corridor have also been completed, such as construction of safety rest areas and added washroom facilities to a number of pullout locations. The necessary front end work for all the twinning, involving design studies, clearing, surveying and a majority of land purchases have been completed.

If the government continued with a cash-based allocation, at a rate of \$50 million per year, full twinning of Highway 63 between Highway 55 and Fort McMurray would take an additional 11 years. I have heard resoundingly that a timeline of 11 years is not acceptable.

A number of potential investment methods to meet an accelerated construction and completion time have been considered. Treasury Board and Finance will have to be engaged to determine the best investment method to meet the desired completion date.

In addition to road-infrastructure, increased enforcement, advertising, and education campaigns have been implemented to improve safety along Highway 63 and all provincial highways as part of the Alberta government's commitment to reducing fatal and injury collisions.

While twinning is important, this alone will not create a safe road. Twinning Highway 63 is only one aspect of what must be a multi-pronged approach to create a safe

transportation environment. Changing driving behaviour will be the significant measure towards increased safety on this road and all other provincial highways.

Guiding Principles

In reflecting on what I heard during the consultations, I used the following principles as guides when reviewing suggestions:

Focus on High-Risk Drivers

- High-risk driving behaviours put all Albertans at increased risk of being involved in a collision. As such, enhanced enforcement recommendations will target the highest risk driving behaviours, such as drinking and driving, driving at unsafe speeds, passing when it is not safe, distracted driving and following too closely.

Support a Safe Driving Culture Change

- Safety initiatives should be aimed at changing the driving culture in Alberta and individual behaviour over time. Awareness and driver education strategies combined with enforcement and community engagement have been shown to change driver attitude, enabling drivers to take personal responsibility related to driving behaviours.

Consistent Safety Approach

- While the focus is on actions that can improve traffic safety on Highway 63, the broader impact of any recommendation should be considered for other provincial highways to deliver improved traffic safety to all Albertans.

Support Economic Growth in the Region

- Government supports economic growth in the Wood Buffalo region and is committed to improving Highway 63 to help achieve this end.
- Government supports free enterprise and competition and believes private industry is best at responding to market demand.

Highway Infrastructure Improvements

Information from Alberta Transportation shows that the highest percentage of collisions on Highway 63 involves animals and that the highest percentage of fatalities is due to head-on collisions. Additionally, the interaction of different vehicle types appears to contribute to collisions on Highway 63. These facts highlight the challenges associated with a largely two-lane, undivided highway with a mix of traffic, as well as the need to ensure that the physical roadway better accommodates the amount and type of traffic present.

I'm not saying the twinning is unimportant. I really believe it is important but accelerating it versus speed enforcement or other options, you know, I just want them considered.
~ Telephone Town Hall Participant

One Albertan directed me to a Transport Canada report (2004), which shows that twinned, divided highways reduce vehicle collisions by up to 60 per cent. By applying this lesson, twinning Highway 63 would significantly reduce collisions, including fatal head-on collisions. Other factors that may influence the collision rate include driver frustration with attempting to pass commercial and industry vehicles, driver fatigue and boredom leading to unsafe driving behaviours and higher traffic volumes during shift change days. While it was made abundantly clear that twinning Highway 63 should be a priority for government, I was constantly reminded by the residents of Fort

McMurray and others that twinning the highway will not be the cure to all dangers on the highway and that enforcement and education also play a key role. Nevertheless, I agree that infrastructure improvements will undoubtedly contribute to the overall safety of Highway 63.

During the telephone town hall, participants were asked: "Would you accept a solution that could include deferring other infrastructure projects, or local and provincial social and economic priorities, to double or triple efforts and resources to twin Highway 63?" Sixty-three per cent of respondents favoured twinning even if it affected other infrastructure projects.

Recommendation 1: Accelerate efforts to twin Highway 63, including forming a project management team to ensure the project is delivered on time and that the public is kept up-to-date on the progress.

Highway 63 needs to be twinned this year. Anything less is unacceptable.
~ Consultation Participant

After examining all construction options, I recommend that a step-by-step construction approach be adopted with the goal of increasing safety on Highway 63. This includes projects that may be completed alongside and/or prior to twinning completion. The infrastructure improvements recommended in this report create short, medium and long term improvements for road safety on Highway 63 in a way that reflects the safety needs of those who travel on this highway.

The size and volume of our traffic warrants the twinning. It has been agreed to years ago and it is way behind. The next 3 years need to complete the task which means approximately a 300-400% increase in productivity.
~ Facebook Post

Twinning Highway 63 is a major step toward improving safety and traffic flow. It is the most effective way to reduce head-on collisions. A physical barrier would separate northbound and southbound traffic. Collisions between vehicles and wildlife may also decrease as additional clearing alongside the highway will improve drivers' ability to see animals approaching the road.

Time and time again, residents have said they expect twinning of this highway to happen as soon as possible.

The formation of a project management team may ensure the project is delivered on time and that Albertans can be updated on progress.

In identifying the best approach for delivering a safe Highway 63, two key factors were identified: determining which approach would aid in completing construction within the shortest time frame and how it would impact existing work already completed. A number of delivery methods for construction projects were brought forward to me during consultations and they were analyzed with the benefits and risks weighed against each approach. When the timeframe and industry capacity were considered it became apparent that a traditional design/bid/build approach was best suited for the Highway 63 project.

*Twin the highway!
Protect the people who make this city thrive!
Protect our children the best way we can.*
~ Facebook Post

The traditional design/bid/build model is the most expedient and cost effective method for completion of a twinned Highway 63 between Highway 55 and south of the Fort McMurray urban service area. The Public Private Partnership (P3) and design build delivery models were also considered.

Recommendation 2: Construct passing lanes in areas of high traffic congestion.

There are currently 15 passing/climbing lanes on Highway 63, two of which were constructed between Highway 55 and Wandering River in 2008. Passing lanes offer drivers the opportunities to safely pass oversized loads and slow moving traffic.

People have indicated that as an interim solution, additional passing lanes should be constructed to alleviate driver frustration and therefore, facilitate safe driving manoeuvres. It is my recommendation that new passing lanes are constructed and that improvements are made to existing passing lanes where possible on Highway 63.

Recommendation 3: Construct more safety rest areas and pullouts along Highway 63.

Current highway safety rest areas generally consist of parking areas, washroom facilities and basic site amenities such as picnic tables and garbage cans. These areas provide fatigued drivers a safe place to take a break. Construction of additional safety rest areas is recommended due to the considerable length of highway and the limited number of existing rest areas. This will give drivers on Highway 63 more opportunities to pull off the highway – something that those who regularly travel Highway 63 identified as a desired amenity. Additionally, these areas present the opportunity for trucks to pull out and allow other traffic to pass.

Another reason for increased safety rest areas and pullouts is that many travellers, especially on shift-change days of Thursday and Sunday, are driving the highway immediately after coming off a work shift at oil sands operations of 12 hours. Rest areas will provide safe options for drivers to rest and recover, which can help reduce the possibility of drivers falling asleep at the wheel and causing collisions.

Recommendation 4: Facilitate the construction of commercial rest areas along Highway 63.

Commercial rest areas consist of businesses such as convenience stores, coffee shops and gas stations that offer additional amenities to traditional safety rest areas. Although commercial safety rest areas have never been constructed on provincial highways in Alberta, successful examples exist in Ontario, Quebec and the United States supported by strong business cases. An enforced competitive pricing clause would ensure equivalent or higher than local prices at commercial rest areas reducing competition with any adjacent community businesses. This recommendation is contingent upon participation from the private sector.

Recommendation 5: Install wildlife fencing in strategic locations and wildlife detection systems to mitigate the risk posed to drivers on Highway 63.

Regular travellers on Highway 63 understand the dangers that wildlife present on this road. Data from Alberta Transportation on Highway 63 indicates that 36.9 per cent of collisions involve wildlife, the largest cause of collisions. Installing fencing on both sides of the highway at strategic locations with a history of animal-vehicle collisions would reduce the frequency of those collisions.

Additionally, the installation of wildlife detection systems may further reduce wildlife collision risk. This system detects large animals through infrared technology as they approach the road. Once wildlife is detected, the system activates signs on the highway that warn drivers of large animals that may be present on or near the road. Studies have reported as much as an 80 per cent decrease in animal-vehicle collisions when using this technology (U.S. Department of Transportation, 2008). Wildlife

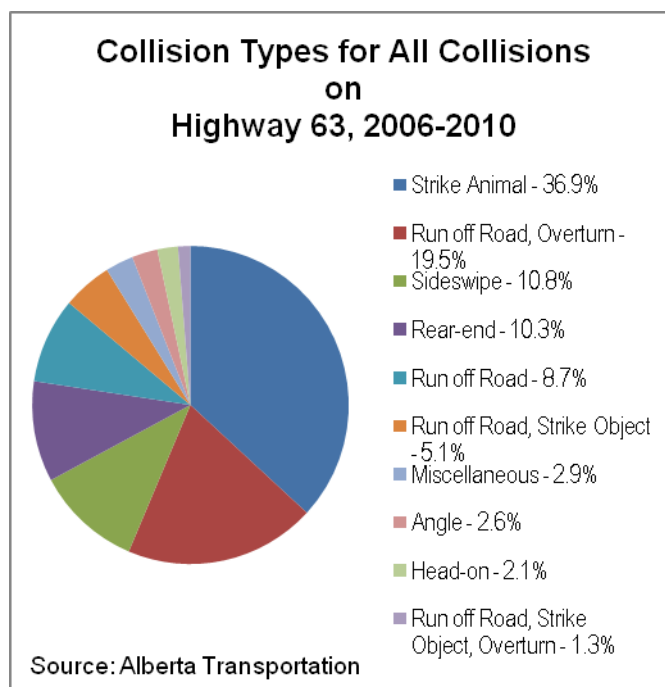
detection systems can be used at locations along Highway 63 where no crossing structure is possible.

Probably a good portion of the collisions that have happened is because of poor maintenance. So and this is something that you guys can do immediately instead of waiting, I don't know, for the next decade for the other highways to be done and it will save a lot of lives.
~ Telephone Town Hall Participant

Recommendation 6: Improve highway maintenance.

I have heard from Albertans who regularly travel Highway 63 that winter road conditions can present a number of challenges. Measures should be put in place to improve the conditions. Alberta's highways are maintained by independent highway maintenance contractors. There are currently maintenance shops at Wandering River and Fort McMurray and one sand and salt storage facility near Mariana Lake, which is approximately midway between Wandering River and Fort McMurray.

The construction of a new maintenance yard would assist in improving providing highway maintenance. The proximity of a new maintenance yard would enable maintenance vehicles to respond to conditions more efficiently.



Recommendation 7: Ensure the line markings on Highway 63 provide safety as well as appropriate passing opportunities.

I think the root cause of the problem with Highway 63 is the slow traffic and the few passing lanes that are presently in place.

~ Telephone Town Hall Participant

While many came forward with suggestions regarding enforcement, education and twinning, others provided ideas to improve the existing highway while construction of the remaining sections of the highway continues. Ongoing highway maintenance remains an integral component in safe roads. Currently, the Alberta government reviews passing zone limits as part of pavement rehabilitation and other surface maintenance work. As tree clearing along Highway 63 continues, sightlines may improve and the potential for additional passing zones may be created. A

review of passing zones along the entire corridor of Highway 63 should commence as soon as possible to confirm and adjust passing locations.

Recommendation 8: As construction moves forward, utilize unpaved but graded areas over the winter months along Highway 63 as an area for oversized loads.

As construction progresses, portions of Highway 63 may be graded in one year and paved the following year. This approach allows the ground to settle prior to being paved so that any shifting that occurs can be repaired prior to paving. This reduces the need for road improvements after the highway is opened for public use. Industry stakeholders have suggested using graded sections of Highway 63 over the winter months for oversized loads.

This would separate oversized loads from other highway traffic and would reduce the risk these slow moving vehicles pose to other drivers on this highway. These intermediate roadways could also serve as an alternate route for traffic in an emergency situation.

Recommendation 9: Construct passing/climbing lanes and safety rest areas along Highway 881 to accommodate oversized loads destined to Highway 881 locations.

As industry continues to expand in northeast Alberta, industrial and commercial traffic on Highway 63 as well as Highway 881 is expected to increase. Many came forward with ideas to improve Highway 881, including passing/climbing lanes and safety rest areas, which would encourage this highway for use by oversized loads and traffic destined for locations on Highway 881.

Recommendation 10: Extend Highway 881 to improve access to new oil sands operations.

Industry stakeholders and the Athabasca Oil Sands Area Transportation Coordinating Committee (TCC) have asked the Alberta government to look to extend a two-lane, paved section of Highway 881 beginning at Anzac north across the Clearwater River to connect to the east extension of Highway 686. The work would also include the realignment of Highway 881 east of Gregoire Lake, thereby improving safety through Anzac. The total project length is approximately 90 kilometres. This construction would provide improved access to new oil sands operations east of the Athabasca River and would reduce traffic on Highway 63 northward from the urban service area and southward to projects along Highway 881.

Recommendation 11: Complete the planning study for the twinning of Hwy 881 to accommodate continuing development.

Improving Highway 881 will reduce the amount of commercial and industrial traffic on Highway 63. Some have suggested that additional twinning of Highway 881 would accommodate further expansion of the communities located in the Regional Municipality of Wood Buffalo along the highway.

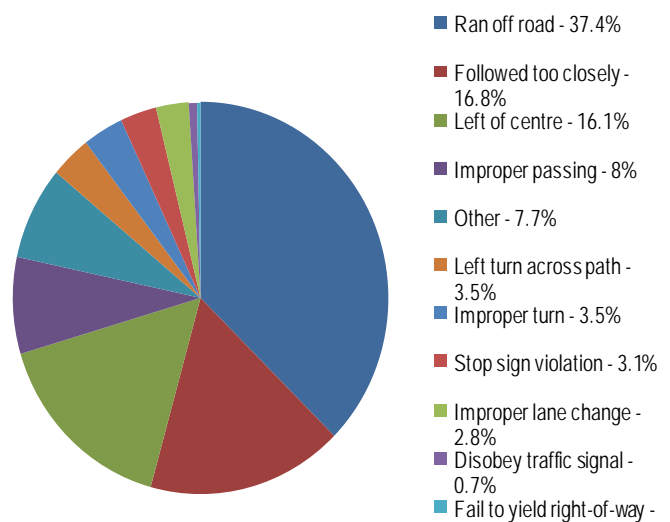
Increased Enforcement

Ensuring drivers behave responsibly on Alberta's highways is a critical component of improving safety on Highway 63. Many respondents related incidents in which they witnessed reckless behaviour on Highway 63 resulting in either a close call or, worse, a collision.

The most common improper driver actions committed on Highway 63, as provided by Alberta Transportation, include running off the road, following too closely, driving left of centre and improper passing. The graphic illustrates the role driver behaviour played in Highway 63 collisions resulting in injury or fatality. In addition, 20.6 per cent of drivers in fatal collisions and 23.4 per cent of drivers in injury collisions were travelling at an unsafe speed.

To deal with the issues of speed and dangerous driving, participants have suggested increased enforcement, higher fines and the potential for vehicle seizures. During the telephone town hall, Albertans were asked to vote on whether or not they

Improper Driver Action in Casualty Collisions on Highway 63, 2006-2010



Source: Alberta Transportation

Bad driving becomes a habit. It's difficult to break a habit. I wish I can make people slow down. And enforcement is a must.
~ Twitter Post

support higher penalties for traffic offenses. The results of this poll found that 79 per cent said yes, we support higher penalties for traffic offences.

There were suggestions that after the twinning is completed, the need to deal with speed and dangerous driving may actually increase. This will require a long term approach to education and enforcement. Additionally, when participants were asked during the telephone town hall, 81 per cent of

callers said those who violate the law should have to pay for enforcement in the long run.

Recommendation 12: Establish a dedicated RCMP/Sheriff and aerial enforcement presence for Highways 63 and 881 to deter dangerous driving behaviour.

Residents in the Regional Municipality of Wood Buffalo as well as regular travellers of Highway 63 said dangerous driving behaviours could be deterred if there were more officers on patrol. At the least, increasing the presence of RCMP and Traffic Sheriffs

Twinning is a good idea, but that won't solve the problem. You can't fix stupid and that is what the problem is, it's stupid drivers that speed and pass at inappropriate times and end up taking the lives of innocent people. Twinned or not twinned, the police presence needs to be evident and abundant.
~ Facebook Post

should result in more violators being caught and penalized, which would make the deterrent factor more present. Long-term, the hope is that a sustained increase of law enforcement presence will deter high-risk drivers and shift driver attitudes toward more reasonable behaviour. Creating a dedicated team of law enforcement officers to specifically patrol Highway 63 would mean law enforcement agencies in Fort McMurray, Boyle and Redwater would not need to divide their resources between their communities and the highway. Alberta's RCMP and Traffic Sheriffs suggest implementation could commence immediately; however, it may take more than a year to fill positions due to the remote location and related staffing challenges.

Further, people have made it clear to me that they are comfortable with moving beyond traditional physical enforcement methods in order to identify and penalize those high-risk drivers who are making Highway 63 a more dangerous place. One option, aerial enforcement, effectively targets excessive speeding by giving law enforcement the ability to have a bird's eye view of vehicles travelling at excessively high speeds. Aerial patrols communicate with officers on the ground to ensure that excessive speeders are caught and penalized. The visual combination of aircraft, posted signs and ground enforcement units have proven effective in changing driver behaviour, causing motorists to slow down and drive safely.

Recommendation 13: Increase maximum penalties for high-risk drivers.

Many say current fines do not deter dangerous driving behaviours. Increasing the penalties for excessive speeding should help to deter this behaviour and make all provincial highways, including Highway 63, safer. To further deter high-risk driving, dangerous behaviours including but not limited to speeding, should be subject to

I've said it before and I'll say it again, we double the fines for speeding when workers are present, let's double or triple the costs of fines. Hit the idiots where it really counts, their wallet books.
~ Twitter Post

a fine of up to \$10,000 to enable Alberta's courts to penalize high-risk drivers.

Recommendation 14: Implement vehicle seizure for drivers caught speeding 50 km/h over the posted speed limit to deter high-risk drivers.

Speeding is a serious issue in Alberta and on Highway 63. In talking to Alberta's enforcement officers, many collisions involve unsafe speeds. Further, excessive speed increases the severity of injury in a collision. Several jurisdictions in Canada have seen a reduction in serious injuries and fatalities since implementing vehicle seizures for excessive speeding. While I have heard strong opinions both for and against this option, the majority with whom I have spoken support increased enforcement that targets high-risk drivers and protects the vast majority of Albertans from those who choose to drive recklessly.

People understand that a vast majority of drivers are safety conscious and responsible. However, there are individuals who still do not understand that their actions on Highway

Now, taking away their car after 50km/h? That makes sense to me, absolutely, that's unsafe.
~ Telephone Town Hall Participant

63 can put other drivers at risk. Data provided by Alberta Transportation shows that a small minority of drivers are travelling at excessive speeds. Appendix B illustrates the recorded speeds of vehicles travelling at speeds greater than 130 km/h near Mariana Lake and north of Confederation way. I think people will agree with me when I suggest that these levels of excessive speeding are completely unacceptable on our roadways and needlessly endanger the safety of all road users.

Information provided by Alberta Transportation shows that the current penalty for speeding more than 40 km/h over the speed limit is \$273 and four demerit points. The penalty increases to \$351, six demerit points and a mandatory court appearance for speeding more than 50km/h over the speed limit. While measures exist within the *Traffic Safety Act* to allow law enforcement officers to seize vehicles for a range of offences, few are seized for excessive speeding. According to the *Traffic Safety Act*, vehicles can only be seized if an officer believes 1) that the examination or testing of the vehicle will furnish evidence relevant to the offence and 2) that evidence could be lost if the vehicle is not seized at that time. Through a change to the existing legislation, we can hope to see a reduction in fatal and injury collisions.

Recommendation 15: Implement passive intelligent speed adaptation as a voluntary measure the Alberta Transportation Safety Board could use to monitor speed compliance with repeat speed offenders.

New technologies such as a passive intelligent speed adaptation device could be installed in the vehicles of drivers caught excessively or repeatedly speeding. This device would persistently advise drivers when they are travelling above the posted speed limit and drivers would be monitored by Alberta Traffic Safety Board. I believe that the use of this technology could help change the attitudes of drivers. By implementing this technology on a voluntary basis, the Alberta Transportation Safety Board could decide to allow repeat and excessive speeders to install this technology into their vehicle in cases where licence suspension or vehicle seizure may result in hardship appeals.

Recommendation 16: Implement point-to-point automated speed cameras in locations where collision data shows there is a high incident rate due to unsafe speed.

*Increased enforcement and photo radar is really “an abuser tax, not a user tax.”
~ Ken Chapman*

Automated enforcement is currently not used as a speed enforcement tool on Alberta highways. Municipalities, however, have implemented speed cameras and photo radar to deter speeding. During the telephone town hall, 63 per cent of voters supported unmanned enforcement such as photo radar or electronic monitoring. A point-to-point automated traffic enforcement system, which measures the amount of time it takes a vehicle to drive between two points and calculates the average speed of the vehicle, may be a more palatable option than

traditional photo radar.

Unlike traditional photo radar, a speeding driver cannot slow down at one location where photo radar is located only to speed up when out of range; rather, a driver must control his or her speed over a long stretch of road in order to avoid a fine. This system can be monitored remotely, requiring fewer enforcement officers on the highway than a manned system and can therefore mitigate some of the unique staffing challenges faced by law enforcement detachments along Highway 63. Revenue generated by point-to-point speed cameras could be reinvested in safety improvements on Highway 63 by funding enforcement and emergency response services, highway maintenance and the costs to twin Highway 63.

*Scan license plate numbers as they are leaving Fort McMurray and again before Grassland and issue speeding fines accordingly.
~ Facebook Post*

Recommendation 17: Expand speed reductions to all lanes passing

Nothing should be taken off the table when it comes to protecting the lives of others.
~ Facebook Post

emergency vehicles and tow trucks where a median does not separate traffic.

Another suggestion was to implement standard speed reductions in areas where emergency vehicles and tow trucks are present on the shoulder of the road or immediately to the side

of the road. Currently, standard speed limit reductions are in place when passing an emergency vehicle or tow truck vehicle only where there is no traffic lane between the emergency vehicle/tow truck and highway traffic. Changing existing legislation to expand standard speed reductions to all lanes passing emergency vehicles, tow trucks and highway service workers, would permit Alberta's emergency response teams and tow truck operators to more safely operate on Alberta's highways.

Recommendation 18: Review permit conditions placed on oversized loads to minimize disruption for peak travel times.

Albertans have asked that the Alberta government review conditions placed on oversized loads to minimize their interactions with other traffic along Highway 63. Oversized loads travel at a reduced speed, which increases congestion and leads to driver frustration. According to data provided by Alberta Transportation, the Alberta government sets the provincial standard for maximum vehicle width. The maximum legal vehicle width is 2.6 metres. Vehicles that exceed this width are required to get a permit which specifies travel and safety conditions. Between May 2011 and May 2012 Alberta issued 13,928 single trip permits for Highway 63. Industry has indicated that this number will increase over the next several years.

After 60 minutes in a 20 car parade doing 60km/h behind a heavy load, I'm finally in Grasslands, 3 hours later.
~ Twitter Post

Perhaps if wide loads are only coming up and down on certain days, we can minimize the disturbance to traffic.
~ Telephone Town Hall Participant

The Alberta government places restrictions on permits to limit the times of day when oversized loads can travel to Fort McMurray. This is based on average daily traffic volume counts to minimize the number of times oversized loads interact with other traffic. In my discussions with industry, I have heard that they are very supportive of working with the Alberta government to review permit conditions and address issues with travel times. I recommend that a review of permit conditions and emerging issues should commence immediately.

Enhanced Education

Driver education is a critical component of ensuring safe roadways. It teaches the public how to approach their responsibilities while driving and it also highlights the risks surrounding certain driving behaviours and potential road hazards.

Driver education is a proven and effective method to help improve safe driving behaviours. By increasing and enhancing driver education initiatives, the driving public will be reminded to take precautions to mitigate these risks. In my conversations, a common theme emerged regarding the role that driver education can play in improving road safety on Highway 63. People have suggested that an integrated and widespread education, awareness and information strategy focusing on Highway 63 will positively impact driving behaviours and lead not only to a safer Highway 63, but also a safer road system throughout Alberta.

Recommendation 19: Enhance driver education through advertising, social media, driver speed feedback signs and safety messaging signs to change the culture of drivers in the region in partnership with existing road safety organizations.

A more effective education campaign on the causes of collisions would be beneficial.
~ Twitter Post

Communication tools such as billboards, posters, radio and television commercials, advertisements on social media networks and roadside safety message signs are also believed to be effective ways to educate the public on the importance of being a safe driver. The goal should be to integrate Highway 63 specific safety messaging with existing messaging and ultimately present comprehensive communications on road safety.

RCMP should do more ticketing for tailgaters which severely increase chances of accidents. It's a fatal problem.
~ Twitter Post

A number of driving behaviours exist on Highway 63 that could be dangerous to other drivers and communicating the dangers of these behaviours could be effective. People are frustrated with drivers attempting to pass several commercial vehicles and long lines of traffic on Highway 63. Unsafe passing increases the safety risks to all drivers and this risk can grow with the expected increase of commercial vehicle traffic on Highway 63. When drivers follow too closely, other traffic is unable to pass slower moving vehicles in a safe manner.

Following too closely also increases the likelihood of rear end collisions. I agree that education is needed to encourage road users to leave an appropriate distance between vehicles to enable drivers to pass safely.

The Alberta government should continue to partner with local safety organizations, not-for-profits, enforcement agencies and industry to launch a multi-faceted, multi-channel campaign that would address risk factors on Highway 63, as well as the driving behaviours that increase those risks, which are also present throughout the province.

There was also an interest expressed in providing drivers with real time feedback on their driving behaviour. Driver speed feedback signs are one tool that can remind drivers of safe driving behaviours and should be installed at key locations along Highway 63 to relay vehicle specific speed information back to motorists. Specifically, these signs will let drivers know when they are travelling above the posted speed limit. Installing these types of signs along Highway 63 will remind drivers of their speed and may deter speeding by creating a perception of upcoming enforcement. I believe that this is a cost effective option that may increase driver awareness of speed in the short term—an approach that many support.

*We are really talking about
changing a culture.
~ Consultation Participant*

Ultimately, driver education initiatives are aimed at changing driving culture. There is a desire to see these types of initiatives in place as soon as possible. Accordingly, these strategies can be implemented quickly and can also be a part of the long term, ongoing strategy to change driver attitude. Despite the benefits that education alone can provide, education needs to be coordinated with enforcement activities in order to maximize the benefits of driver education.

Recommendation 20: Develop an information tool that provides drivers with current online updates and information sign boards to communicate road and weather conditions, traffic delays, time to destination and the movement of oversized loads.

During my conversations, a theme has emerged that suggests the Alberta government should utilize any and all technologies that can improve the road system and make it easier for drivers to prepare for the road conditions they will face. The Alberta government has already taken some steps to integrate Intelligent Transportation Systems (ITS) technology into Highway 63. There are presently five road weather information system stations between Grassland and Fort McMurray on Highway 63 and Highway 881. They are located near Grassland, near Heart Lake, at Conklin Hill, at Mariana Lake and at Supertest Hill in Fort McMurray and are equipped with atmospheric and road sensors and web cameras. The information from the road sensors and cameras is available for viewing on the internet. More of these should be installed.

The Alberta government has three dynamic messaging signs between Grassland and Fort McMurray serving both Highways 63 and 881. These signs advise drivers of any road closures they may encounter as well as adverse road and weather conditions.

These signs can be updated remotely, 24-7. By using existing dynamic messaging signs and purchasing additional signs, road and weather conditions, traffic delays, time to destination and the movement of oversized load information can be communicated quickly and accurately to all drivers on the highway.

Recommendation 21: Continue to work with industry, associations and existing organizations to promote safety awareness and encourage a culture of safe driving behaviour among their employees.

People expect their government to take a strong leadership role with respect to Highway 63, several industries are already showing strong leadership in promoting traffic safety with their employees. Several companies have implemented strategies to either deter their employees from speeding or prohibit their employees from speeding by using GPS technology. Continuing to encourage this safety conscious attitude from industry should be a priority and an ongoing initiative.

Stakeholders have also told me to be mindful of the role commercial vehicles play in improving road safety and have asked government to examine what can be done to

*Driving Highway 63 and just had 5 truckers pass me on a double yellow line and in a construction zone.
~ Twitter Post*

prevent commercial vehicle drivers from behaving dangerously on Alberta's roadways. The Alberta government currently issues Safety Fitness Certificates to registered owners of commercial vehicles to ensure their compliance with safety legislation and to discourage dangerous driving behaviours by placing conditions on the carriers' certificate. These carriers are responsible for ensuring their employees operate vehicles in a safe and responsible manner. This gives the Alberta

government a tool to prevent repeated dangerous driving behaviours in commercial vehicles. The Alberta government will intervene with carriers that have a serious safety event or a history of non-compliance that puts the public at risk.

By continuing partnership between industry and government, we can address gaps in safety awareness among commercial and other company vehicle drivers.

Recommendation 22: Revise the driver's guide to include a section on safe travel practices when approaching and passing oversized vehicles.

I received many suggestions that could improve the overall safety of Highway 63 with the use of educational materials. However, one aspect of traffic safety that significantly impacts drivers on Highway 63 is lacking in the province's fundamental education tool: the driver's guide. Revisions could be made to the *Driver's Guide to Operation, Safety and Licensing* to include a section on safe travel practices when approaching and passing oversized vehicle loads. These changes should be made as soon as possible.

How we can pay for it

Completion of these improvements is beyond the funding approved in Alberta Transportation's program. A number of potential options are available to pay for the remaining Highway 63 safety improvements.

Use Existing Revenue

The existing revenue option follows the existing process whereby funds are allocated based on revenues in the year the funding is required. If other operating and capital spending remains unchanged, the addition of the Highway 63 safety improvements means that more revenue will need to be available to pay for the project. If additional revenue is not available, then other capital projects may need to be deferred or delayed or operating spending would need to be reduced. This approach would use the current year's revenues to pay for the safety improvements.

Toll Model

A toll model includes a mechanism to collect funds from highway users. As part of the toll model, the government would be required to initially finance the project, with part of all of the financing repayments occurring over many years from toll revenue. Local Fort McMurray residents and oil sands industry members have indicated that tolls would be viewed as another form of taxation and would not be supported. Such a toll could be considered as discriminatory as there is no real feasible alternative route.

New Enforcement Initiatives

A number of new enforcement initiatives (increased fines, automated radar, etc.) are being considered to increase the safety of the Highway 63 corridor. Incremental funds generated by these new initiatives could be directed to the following areas:

- First responders,
- Highway maintenance, and
- Repayment of any financing required for the improvement project.

Federal Funding

The Federal government committed \$150 million towards the initial \$320 million budgeted for the first 100 kilometers. The Federal government has made very encouraging signs by announcing new infrastructure projects in their recent budget. Although the criteria and allotment to Alberta is not yet known, I am hopeful that the Federal government is amenable to future partnerships with the provincial government to make strategic investments in this priority infrastructure that benefits all of Canada.

Financing through the capital markets

Using capital markets would be undertaken by selling Province of Alberta bonds in the capital markets. There is a very large capacity and market for Province of Alberta bonds

in the Canadian and global markets. Selling provincial bonds would be the most cost effective way to raise cash to meet the cash flow requirements of the project. The term of the borrowing could be as short as 5 years or as long as 30 or more years. Repayment could possibly be through dedicating a portion of the existing royalty regime.

Public Private Partnership (P3) Model

The P3 design/build/finance/operate (DBFO) process has been successful in delivering large projects on time and on budget. Province of Alberta P3s have included both public and private financing with the private financing being repaid over the life of the agreement. While the private financing in a P3 is more expensive than direct government borrowing, in some cases other cost savings can be realized that can more than offset the higher cost of private financing.

For this project cost savings through a P3 process are not expected for a number of reasons. There are only a few bridge structures and minimal adjustments available for the roadway alignment. There are also remaining risks due to environmental issues that would result in an additional risk premium or delay in the start of the project. Additionally, the DBFO delivery process requires a procurement timeframe in the range of 8-12 months delaying the start of construction.

Appendix A

List of Stakeholders

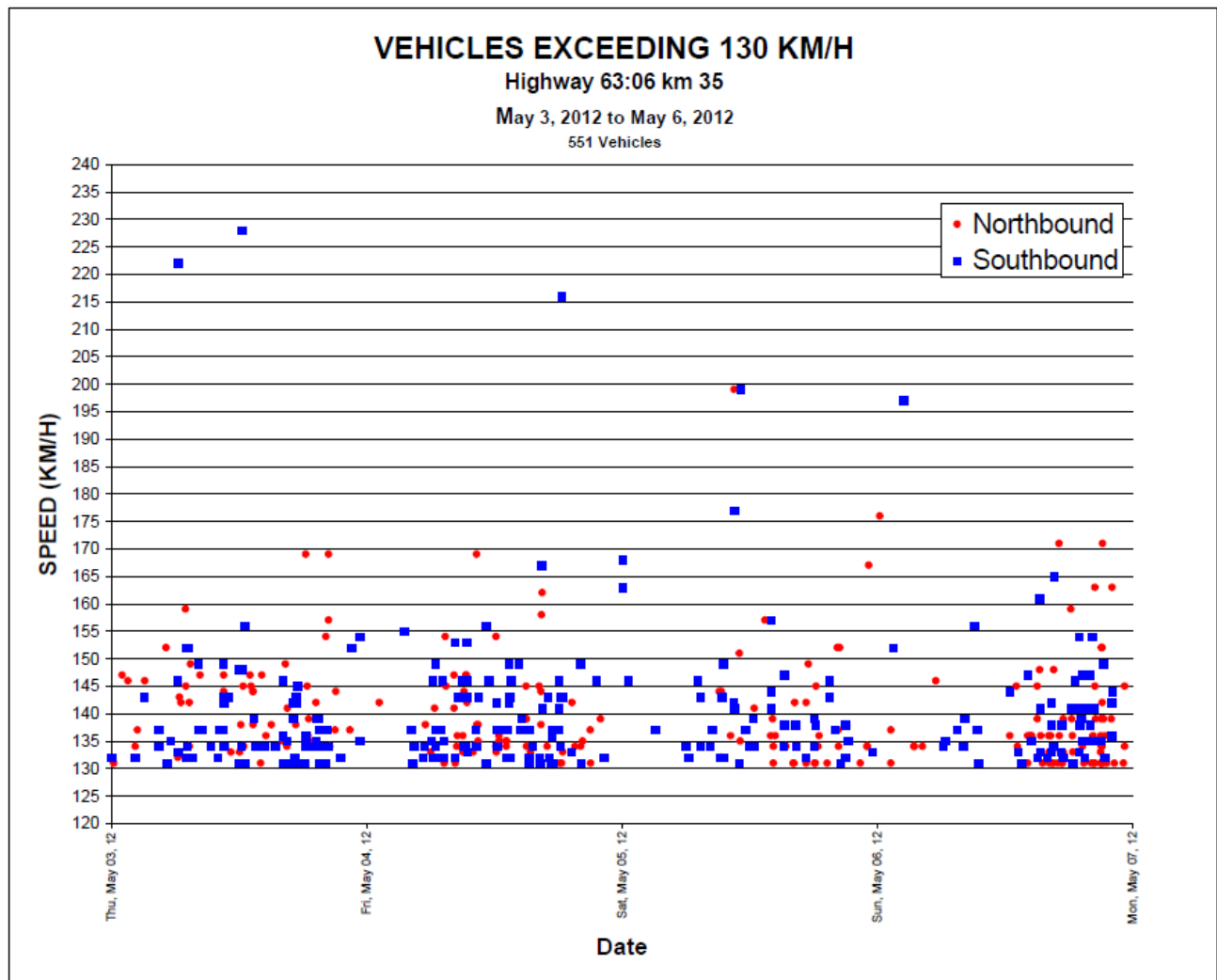
- Alberta Chamber of Commerce
- Alberta Environment and Sustainable Resource Development
- Alberta Energy Corridor
- Alberta Federation of Police Associations
- Alberta Finance and Treasury Board
- Alberta Justice and Solicitor General
- AMA
- Alberta Municipal Affairs
- Alberta Road Builders Association
- Alberta Residents
- Alberta Transportation
- Athabasca County
- Athabasca Tribal Council
- Canadian Natural
- Consulting Engineers of Alberta
- County of Athabasca
- County of Lac La Biche
- County of Thorhild
- CSEG Foundation
- Devon
- Diversified Transportation
- Dillon Consulting
- Fort McMurray Airport Authority
- Fort McMurray Chamber of Commerce
- GENIVAR Inc.
- Global Traffic Group
- Grasslands Fire Department
- House Movers Association
- Lac La Biche Chamber of Commerce
- Mammoet
- MEG Energy
- NAABA
- Northern Lights Health Foundation
- Oil Sands Developers Group
- Phoenix Helicopters

- Professor Emeritus and Attorney at Law
- RCMP K Division
- Regional Municipality of Wood Buffalo
- Sarens Group
- Service Alberta
- Teamsters Canada
- Thorhild Fire Department
- Transtec
- Village of Boyle
- Wilson Industries

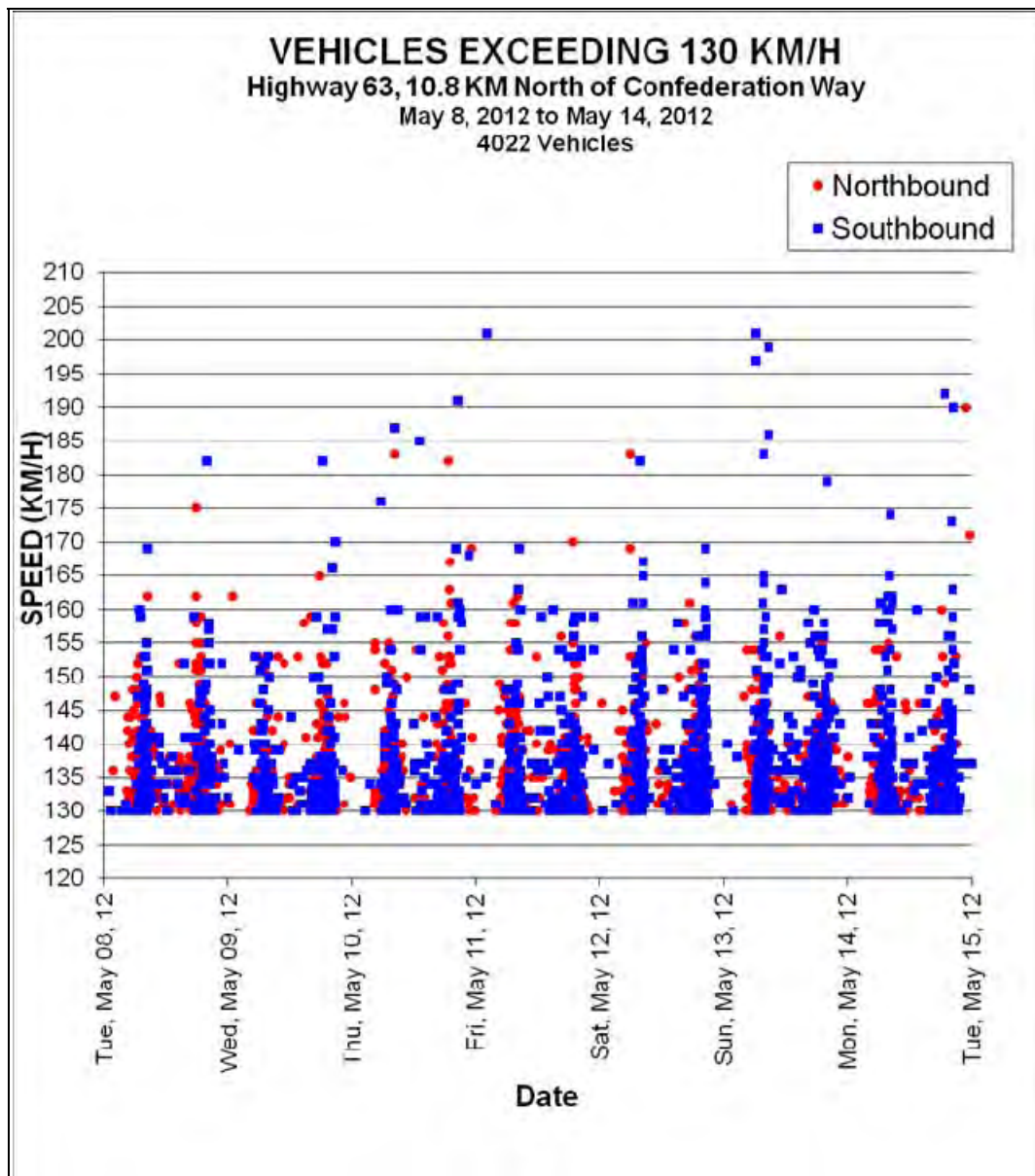
Appendix B

Vehicles exceeding 130km/h near Mariana Lake

Data provided by Alberta Transportation, shows the speed of all vehicles in the Mariana Lake region that exceeded 130km/h. As can be seen in the chart below, between May 3, 2012 and May 6, 2012, one vehicle was caught speeding at a rate of 228 km/h. It is obvious that speeding remains a top issue for the overall safety of Highway 63.



Data provided by Alberta Transportation, shows the speed of all vehicles North of Confederation Way that exceeded 130km/h. As can be seen in the chart below, between May 8, 2012 and May 14, 2012, one vehicle was caught speeding at a rate of 203km/h.



Appendix C

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